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Aspects of State-Wide Emergency Response Programs for Municipal Wastewater Treatment Facilities Programs

Wiley and Wilson, Inc, Lynchburg, Va

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FOR THE
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ABSTRACT

This document provides information to assist in the development of State emergency programs in responding to spills of raw or inadequately treated municipal wastewater. This manual emphasizes the legal aspects of spill reporting, the definition of a reportable spill, and State-wide aspects of emergency response planning.

Preliminary steps in this work included a review of existing and proposed Federal statutes and current State water pollution control laws and regulations. Input from the National Oil and Hazardous Substances Pollution Contingency Plan, the U.S. Office of Emergency Preparedness, the American Water Works Association's Emergency Planning Handbook, the Office of Civil Defense's Publication, Civil Defense Aspects of Waterworks Operation, and Virginia's Natural Disaster Assistance Plan has been incorporated in this manual. Over 55 State and interstate agencies were asked to provide information on existing or future water pollution contingency plans, and over two hundred wastewater treatment facilities were asked to provide information on emergency plans.

The guidelines presented are not intended as rigid formats. Each State response plan must be modified to the individual situation.

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SECTION I
CONCLUSIONS

1. Very few States have written into their State laws a requirement that municipal wastewater treatment system owners report spills of raw or inadequately treated sewage. However, many State Water Pollution Control Agencies have adopted regulations, under authority of State law, that require such a spill be reported.

2. Because of the many conditions that must be evaluated when investigating a municipal wastewater spill (waste characteristics to include strength and volume, receiving stream assimilation capacity, and downstream water uses), the States do not place the burden of estimating incident severity on the individual treatment system owner. The States require reporting of any discharge of inadequately treated wastewater, and the State Water Pollution Control Agency collects the information necessary to determine the environmental impact of the spill.

3. Few States currently have formal contingency plans specifically for spills of municipal wastewater. However, several States have oil and hazardous materials spill plans, and several States provide stream sampling teams to respond to water pollution emergencies. General information on the philosophy of emergency response planning is available from the National and Regional Oil and Hazardous Substance Pollution Contingency Plans, the U.S. Office of Emergency Preparedness, the Department of Defense, Office of Civil Defense, and State Civil Defense Plans.

4. With little effort, the existing Water Pollution Control Agencies in most States could be organized to provide a more efficient response to municipal wastewater spills. All State Water Pollution Control Agencies now respond to water pollution emergencies. In most cases, the agencies have sufficient personnel and communication capability to respond in an acceptable manner. A well thought-out plan, similar to the Oil and Hazardous Materials Plans now existing in several States, would minimize the environmental, public health, and public welfare impact of municipal wastewater spills.

5. Very few municipal treatment systems have formal emergency response plans. Most owners rely on adequate staffing and sufficient equipment to cope with emergencies.

SECTION II
RECOMMENDATIONS

All States should review their existing water pollution control laws and regulations and, if necessary, provide a requirement for reporting spills of raw or inadequately treated municipal wastewater.

All States should develop a plan for receiving spill reports on a 24-hour-a-day basis and set up a mechanism for responding in a prompt and efficient manner. Coordination of emergency plans between adjacent States that have a common river basin should be encouraged.

All municipal wastewater treatment system owners should develop local emergency response plans and provide training for local personnel involved in emergency planning.

Flow models should be developed of critical streams in each State. These models will help provide a rapid severity estimate for a given spill.

State Water Pollution Control Agencies should develop a preliminary spill classification procedure. This procedure will enable a State representative to classify a given spill as *Major* or *Minor* using preliminary spill report information. This classification will ensure early and appropriate responses to spill reports.

Municipal wastewater treatment system owners should analyze the vulnerability of their systems and other pertinent data which can aid them in developing local emergency programs.

All municipal wastewater treatment facilities should develop a list of treatment capabilities during periods of equipment or treatment process failure. Such a list will aid in estimating the degree of treatment that the wastewater is receiving for any given failure condition.

Emergency equipment and personnel inventories should be established by all municipal wastewater treatment facilities.

Professional, technical, and service organizations (Water Pollution Control Federations, American Society of Civil Engineers, etc.) should provide opportunities for personnel involved in emergency planning to receive up-to-date training in this area.

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All States, either through existing organizations (Council of State Governments, etc.) or new groups, should exchange ideas, techniques, and philosophy concerning emergency response plans.

SECTION III
INTRODUCTION

Scope and Purpose

The primary function of municipal wastewater treatment facilities is to collect and treat municipal wastewaters so as to attain an interim national " . . . goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife, and provides for recreation in and on the water." The Federal Water Pollution Control Act Amendments of 1972 stipulate that this is to be accomplished by publicly owned treatment works in a consistent and reliable manner; treatment works must meet effluent limitations based upon secondary treatment, or any more stringent applicable limitations, by July 1, 1977, and must employ the best practicable waste treatment technology by July 1, 1983. The specific conditions and limitations will be identified in a permit issued to each point source discharge under the "National Pollutant Discharge Elimination System" as established by the Act.

Since the discharge of pollutants in excess of the effluent limitations defined in the plant's discharge permit is prohibited by the Act, it is essential that municipal wastewater plants, from the day of initial operation, effectively treat wastewater to be in compliance with those limitations. It is to assist in the accomplishment of this objective that this manual has been prepared.

Project Phases

The development of this manual began with a thorough review of the National Oil and Hazardous Substances Pollution Contingency Plan. The literature survey was expanded to include Regional Oil and Hazardous Substances Pollution Contingency Plans, Interstate Water Pollution Contingency Plans, various EPA publications dealing with control and spill prevention techniques for hazardous polluting substances, various State techniques for response to water pollution emergencies, civil defense planning, and the emergency planning philosophy of various organizations in water-related fields.

Federal statutes, both existing and proposed, related to water pollution were reviewed and a tabulation of pertinent features from applicable statutes was prepared. All State Water Pollution Control Agencies were contacted and requests for current water pollution control laws and agency regulations were made.

Surveys of organizations with expertise in emergency planning and conferences with individuals working in this field were conducted. A request for information on existing or proposed contingency plans was made to all States and major interstate agencies. A questionnaire was prepared, approved by the Office of Management and Budget, and mailed to over 200 municipal treatment facilities across the country.

The results of the literature survey, the review of Federal and State statutes, the field trips, the responses to the questionnaire, and input from Wiley & Wilson's sanitary engineering conceptual design team are included in this manual.

Manual Format

Persons using this manual should be familiar with its organization and the general content of its sections.

Detail discussions of the basic features of good emergency planning and response to spills of municipal wastewaters are covered in the following sections:

Section IV .....General
Section V .....Organization
Section VI .....Facilities
Section VII .....Reporting Systems
Section VIII ..... Cost Recovery

The following is a synopsis of each of the five sections:

Section IV – General

This section discusses an appropriate definition for spill. Sample definitions are given from various States. Other aspects of a good program are discussed, such as responsibility for the program, dividing a State into regions, stream modeling, local emergency response programs, and spill classification.

Section V – Organization

This section discusses the various groups of persons that should be organized to cope with spills.

Section VI – Facilities

This section deals with a discussion of response centers on the State and regional levels.

Section VII – Reporting System

This section deals with the proper method of reporting spills from the local level to the State.

Section VIII – Cost Recovery

This section delineates the importance of reimbursable costs of spill damage and cleanup. Also included is a system of fines with some examples from several States.

SECTION IV
GENERAL

Spill Definition

Prior to initiating any State-wide program for responding to municipal wastewater sewerage system emergencies regarding spills, the criteria for defining a reportable spill must be selected. This section contains several reportable spill definitions from existing State Water Pollution Control Agency regulations and a sample definition derived as a composite of the above.

FLORIDA

In the event the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind, or other cause, the permittee is to immediately notify this Department. Notification shall include pertinent information as to cause and what steps are being taken to correct the problem and prevent its recurrence and the owner's intent toward reconstruction of destroyed facilities where applicable. (Rules of the Department of Pollution Control, Chapter 17-4.13)

GEORGIA

Whenever, because of an accident or otherwise, any toxic or taste-and-color producing substance, or any other substance which would endanger downstream users of the waters of the State or would damage property, is discharged into these waters, or is so placed that it might flow, be washed, or fall into them, it shall be the duty of the person at the time in charge of such substance to forthwith notify the Division for Georgia Water Quality Control in person or by telephone of the location and nature of the danger, and it shall be such person's further duty to immediately take all reasonable and necessary steps to prevent injury to property and downstream users of said waters. (Rules of State Water Quality Control Board, Chapter 730-5-.03)

INDIANA

Any unusual change in volume and characteristics of the effluent, either planned or accidential, shall be reported immediately to the Office of the Technical Secretary. (Stream Pollution Control Board of the State of Indiana, Regulation SPC 11, March 3, 1971)

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KENTUCKY

Whenever by reason of emergency, accident, or otherwise excessive spills or discharges of sewage, industrial, or other wastes, shall have occurred from impoundments, treatment works, disposal system or outlet, storage basins or otherwise, the responsible person, persons, corporation, or others shall immediately by phone or telegram notify the office of the Water Pollution Control Commission, giving all information concerning the point of discharge, characteristics of the effluent being discharged and whether or not such discharge is continuing or has been stopped. (Water Pollution Control Commission Regulation, WP-3, Paragraph 2)

OREGON

Approval shall be obtained from the State Sanitary Authority before bypassing any sewage or industrial waste treatment plant or unit thereof except in case of emergency. If an emergency occurs and bypassing for more than 24 hours is necessary, the Authority shall be notified immediately. A record of the date and duration of all bypassing shall be maintained. (Oregon Administrative Rules Chapter 340, 42-020, April 15, 1972)

VIRGINIA

Every owner certified under the State Water Control Law shall immediately advise the Board by telephone or telegram, to be confirmed by letter, giving all available details, including known adverse effects on aquatic life and the known number of fish killed, should any unusual or extraordinary discharge of wastes to State water occur.

Unusual or extraordinary discharges are defined as any discharges of waste resulting from:

1. Unusual spillage of materials resulting directly or indirectly from the owner's processing operations.

2. Breakdown of processing or accessory equipment.

3. Failure of or taking out of service sewage or industrial waste treatment plant or auxiliary facilities (such as sewer lines or sewage or industrial waste pump station).

4. Flooding or other acts of nature.

(Regulation No. 4, State Water Control Board)

OKLAHOMA

When a lift station or the water pollution control plant, or any part of such facilities are bypassed, the operating reports shall include the time such units were bypassed, the volume of waste bypassed, and the reason for such bypassing. (Sec. 3-D State Board of Health Rules and Regulations Governing the Operation of Water Pollution Control Facilities)

KANSAS

. . .emergency or accidental discharge of sewage or other materials detrimental to the quality of waters of the State shall be immediately reported to the State Department of Health by the owner of the Treatment Plant or his representative. . . (State Board of Health Regulation 28-16-27)

After a review of the preceding, the following definition was derived for use in this report:

Wastewater discharged from a municipal sewerage system which may be raw or partially treated, in such quantities as to pose a threat to public health and welfare, and have an adverse effect on the environment, related to emergencies, accidents, breakdown of equipment or bypassing shall be defined as a reportable spill.

The existing State spill definitions and the sample definition for a reportable spill have been provided to assist in developing a new definition, either to provide guidance in the revision of an existing definition, or to permit comparisons between existing State definitions.

Responsibility

The prime responsibility for a State's emergency response program relative to wastewater spills should be given to a single agency. This does not eliminate other State agencies, such as the State Game and Fish Commission, State Police, State National Guard, from participation in the program, but simply establishes a procedure to improve coordination and avoid duplication of effort.

Regions

The State should be divided into regions. The regions might be defined by river basins, political jurisdictions, planning districts, or according to population density. Each State can best determine how the regions within its boundaries are defined. However, these regions

should not be chosen arbitrarily and, once selected, a periodic review should be made to ensure that they remain consistent with overall emergency program objectives.

Plant Inventory

An inventory of all municipal wastewater treatment plants within the State should be made with the plants grouped according to the region in which they are located. A map showing the boundaries of the regions and the location of the municipal wastewater treatment facilities should be developed and kept up to date.

Stream Modeling

Critical receiving streams in the State should be studied and modeled. These models will provide an initial estimate of the effect a given spill will have for a specific stream flow condition. The models should be updated periodically to ensure reliability of their predictions. The type and location of downstream water users should also be determined of each municipal wastewater treatment facility discharge. A priority list and a procedure for alerting these downstream water users should be established and updated continuously.

Dye studies can be used to estimate the travel time for water-soluble wastes being transported by a river. The studies should be made during various flow conditions in order to minimize the errors resulting from extrapolating data from only one or two river flow conditions. All limitations built into such a study should be clearly defined, enabling the personnel preparing and using the data to apply proper engineering judgment in their work.

Figure No. 1 is a typical presentation of the data that can be obtained from a dye study. It can be used by the State Water Pollution Control Agency personnel and downstream water users to estimate when a spill at a known river mile/station will arrive at a given downstream location.

Local Emergency Response Programs

The State Regulatory Agency should ensure that municipalities have acceptable emergency response plans to detect, respond to, and minimize the effects of spills. Each municipal plan should have contingencies for spills from upstream sources and should provide for coordination or mutual assistance as required. The municipal emergency plan also should be compatible with the State plan. As a requirement to be met prior to issuing a discharge permit, the State Regulatory Agency should obtain from each facility owner an acceptable breakdown of treatment capabilities during periods of equipment or treatment process failures. This description will aid the State in estimating the degree of treatment that the wastewater would receive for any given failure condition.

Water Intake for Capital City (DOWNSTREAM WATER USER) — RM 30.5 (RIVER MILE/STATION)

TABLE GIVES TIME IN HOURS FOR A SPILL TO ARRIVE AT

RM 30.5 (RIVER MILE/STATION) IN THE Black Water River (RECEIVING STREAM) FROM SPILLS

UPSTREAM.

LOCATION OF SPILL (RIVER MILE/STATION)

	RECEIVING STREAM FLOW RATE* IN CUBIC FEET PER SECOND (CFS)			
MILE/STATION	2000 CFS	3000 CFS	5000 CFS	8000 CFS
RM 32.0	_____ HR.	_____ HR.	_____ HR.	_____ HR.
RM 33.0	_____ HR.	_____ HR.	_____ HR.	_____ HR.
RM 34.0	_____ HR.	_____ HR.	_____ HR.	_____ HR.
RM 35.0	_____ HR.	_____ HR.	_____ HR.	_____ HR.
RM 36.0	_____ HR.	_____ HR.	_____ HR.	_____ HR.

* Note: Give location (River Mile/Station) where this flow was measured.

FIGURE NO. 1
SAMPLE DYE STUDY FLOW DATA PRESENTATION
(Similar to that used by Louisiana State Health Department)

The following list is provided to aid States in preparing emergency response programs:

1. Each plant's Operations and Maintenance Manual should include a list of all parts, components, lubricants, tools, and chemicals to be kept on hand and in what quantities.

2. The plant owners should provide the State with a breakdown of their maintenance forces and their maintenance capabilities.

3. The owners should maintain a complete and current list of equipment manufacturers and their local representatives.

4. The State should obtain each plant's in-house laboratory capability and a list of private laboratories within the State.

5. The location of emergency equipment such as generators, radio communications equipment, and portable sampling equipment should be inventoried by the owner.

6. Full use should be made of related manuals published by EPA. In particular, reference is made to "Emergency Planning for Municipal Wastewater Facilities," and "Considerations for Preparation of Operation and Maintenance Manuals." Both of these manuals should prove useful tools in the preparation of emergency response programs.

After the State has developed an emergency response program, emergency response exercises should be conducted for simulated emergenices. These exercises should be critiqued and improvements made to the emergency response plan. All responses to actual emergencies should also be critiqued.

Most State and local civil defense organizations conduct periodic drills to test their preparedness. These organizations can be a valuable source of information on the methods and techniques used for conducting emergency response drills.

Spill Classification

Criteria should be established for each treatment facility so that spills can be classified as *Major* or *Minor* using preliminary spill report information. The spill classification may be changed after an on-scene inspection of the spill site. A preliminary classification will allow appropriate response action to be initiated, particularly if the response requires providing physical assistance. For example, a bypass condition where unchlorinated raw sewage is entering a receiving stream above a domestic water supply intake might require portable chlorination units to be moved to the spill site and river sampling program initiated to monitor water quality.

Five spill classification parameters which might be employed in a preliminary classification procedure are:

1. Location of the municipal wastewater spill
2. Character of the waste
3. Quantity
4. Potential for ecological damage
5. Estimated response effort required

The spill classification procedure presented herein was developed to provide a consistent method of rapidly classifying a reportable spill of municipal wastewater as *Major* or *Minor*. The preliminary classification will serve as an alert mechanism for the emergency response plan. The method is not intended to provide the final spill classification since the severity of a given spill is dependent upon many parameters, most of which must be developed as the on-scene investigation progresses. The spill classification is weighed to evaluate the response requirements in terms of manpower and equipment with respect to the spill location, character of waste spilled, quantity of spill, and potential for ecological damage.

To classify a spill as *Major* or *Minor*, select one of the statements beneath each of the classification parameters that most clearly describes the existing spill situation. The numerical values assigned to each statement chosen are then added together. If their total is less than 75, the preliminary classification of the spill would be *Minor*; if their total is greater than 75, the preliminary spill classification would be *Major*. Reference is made to the following:

Parameter	Value	
Location	(5)	On land with potential for entering State waters
	(10)	Offshore ocean waters
	(20)	Streams, lakes and estuaries
	(50)	Endangers public health; into stream above and in close proximity to domestic water supply intakes, recreation areas, shellfish beds
Character	(5)	Partially treated with chlorination
	(10)	Partially treated without chlorination
	(20)	Raw sewage with chlorination
	(50)	Raw sewage
Quantity	(5)	Equal to or less than 1% of facility design flow
	(10)	Between 1% and 25% of facility design flow
	(20)	Between 25% and 50% of facility design flow
	(50)	100% of facility design
Ecological Damage	(5)	Minimum potential; on land, offshore, inland salt waters
	(10)	High potential; streams, lakes, estuaries
	(50)	Critical potential; shellfish beds, spawning grounds, game reserves, public water supply
Response Effort	(0)	Notification received and no State assistance necessary
	(5)	State-On-Scene Coordinator (SOSC) only State representative at scene
	(10)	SOSC plus Stream Sampling Team
	(50)	SOSC, Stream Sampling Team, plus mobile chlorinators and other emergency equipment

NOTE: Refer to Section V for description of SOSC and Stream Sampling Team.

SPILL CLASSIFICATION EXAMPLES

PARAMETERS	EXAMPLE NO. 1	EXAMPLE NO. 2	EXAMPLE NO. 3
	Value	Value	Value
Location	50	20	5
Character	50	50	5
Quantity	50	50	5
Ecological Damage	50	10	5
Response Effort	50	5	0
Total	250	135	20

Example	Description	Classification
No. 1	Maximum point value	75 or greater – Major
No. 2	Spill to receiving stream, raw sewage, 100% of design flow, high potential for ecological damage, SOSC only	75 or greater – Major
No. 3	Minimum point value	Less than 75 – Minor

SECTION V
ORGANIZATION

Strike Forces

The State emergency response plan should provide for immediate reaction to spill reports by properly trained and equipped teams and/or individuals. These strike forces should be capable of responding to specific emergency conditions.

As a minimum, the strike force should consist of a State-On-Scene Coordinator (SOSC). He should be charged with the responsibility and delegated the authority for directing the overall operations of all forces engaged in combating a municipal spill. The strike force might be expanded to include a team and/or sanitary engineering consultants to conduct a stream sampling program.

Equipment and personnel solicited by the State to assist a municipality experiencing an emergency should come under the control of the State-On-Scene Coordinator. It is possible the State police or highway department would be requested to assist during an emergency.

A State may decide to maintain personnel and equipment to respond to emergencies at municipal wastewater treatment facilities. However, it is anticipated that most municipalities will be able to provide the physical necessities through their in-house capability or through mutual aid agreements.

The strike forces (in most cases, the State-On-Scene Coordinator) will be responsible for making the severity analysis (Section IV). The severity analysis will determine the degree to which the region and State will respond to the incident.

The State-On-Scene Coordinator should possess the following:

1. Working knowledge of the characteristics of all municipal wastewater treatment facilities for which he is responsible.

2. Good working arrangement with the key personnel at each treatment facility.

3. Current flow charts complete with names, titles, telephone numbers, and alternates to assist in the reporting of an emergency.

4. Mechanism to ensure that his report on the severity of the emergency is relayed promptly and accurately to the regional center.

The SOSC's and alternates should be trained in all phases of emergency response to wastewater spills. The SWPCA staff responsible for the SOSC training program ensures all new developments in spill response techniques are promptly incorporated in SOSC training programs.

The SOSC is kept informed of the availability of resources in his own region and in adjoining regions. He is also familiar with the emergency equipment inventories maintained by the State.

Stream Sampling Teams

For each municipal wastewater discharge and other potential spill location, such as a pump station, sampling points should be selected along receiving streams below these locations. This will enable sampling to be done promptly and efficiently to determine the effects of a spill from a given source. The State should organize and provide personnel as emergency stream sampling teams. The teams should be tailored to handle expected duties at the site of any given spill and should be provided with adequate transportation. These teams are to be used strictly for initial response action, and if prolonged sampling is required, this work should be turned over to the State's regular stream sampling staff.

Evaluation Team

In the judgment of the State Water Pollution Control Agency, it may be advisable to activate an evaluation team. The purpose of the team should be to:

1. Evaluate the techniques, equipment, and materials used in response to the spill.

2. Assess damage to aquatic life and public health.

3. Assess damage to wildlife.

The evaluation team should consist of representatives from the following State agencies:

1. State Water Pollution Control Agency

2. State Health Department

3. State Department of Natural Resources

4. State Game and Fish Commission

Any State agency that has the necessary expertise, including the attorney general's office, may be designated as a member of the evaluation team for a particular incident.

Public Information Officer

When an emergency response action is initiated, the public should be promptly and accurately informed about the nature of the emergency and about what actions are being taken to minimize the environmental impact of the incident. To accomplish this goal, a good working relationship must be established with the news media. Out of this relationship should come a mutual understanding of the problems involved and agreements on procedures to be followed during emergencies.

A public information officer should be appointed within the State Water Pollution Control Agency to handle emergencies related to spills of raw or inadequately treated municipal wastewater. This individual should provide support to the regional public information officers in his State. He also will serve as the primary news media contact when an emergency condition exists which directly involves two or more of the regions of his State. The State public information officer should assist the regional officers in preparing a State-wide list of the news media to be contacted during an emergency. This list should be broken down by regions within the State.

The State public information officer should ensure that news conferences are held at appropriate intervals and that at least two written status reports are given to the news media each day until the emergency condition is over. Personal or telephone requests from the general public should be anticipated and provisions made to provide these requests with the information contained in the latest status report. When the emergency condition is over, a form letter should be drafted including all facts related to the incident. This form letter can be sent in reply to mailed inquiries about the incident. Liaison with adjacent States is also an important function of the State public information officer.

SECTION VI
FACILITIES

State Response Center

The purpose of the State Response Center is to provide facilities for coordination and control of response actions that involve a multiregion or interstate incident. The facilities should include necessary office space, adequate communications, access to a technical library, information on water quality and water uses of streams within the State, access to a computer capability for stream modeling, and maps showing all waste discharges, river intakes, and recreation areas along the streams of the State. Space should be available for use as a "Situation Room" where maps and communications equipment can be installed to monitor and plot response actions. The facilities and technical, administrative, and clerical staff of the State Response Center should be available to support requests for assistance from any regional center within the State. Figure No. 2 shows a sample floor plan for a State Emergency Response Center.

The logical location for the State Response Center would be the headquarters offices of the State Water Pollution Control Agency. This agency generally possesses most of the desired capabilities as part of their normal operations. In most cases, minor augmentation to existing facilities will be sufficient. The keys to an efficiently operated response center are adequate communications and staffing. Key personnel at the State Response Center should have alternates that have been preselected and trained. The State public information officer should operate from the Center during an emergency.

Regional Response Center

The Regional Response Centers should be selected by the group developing the State emergency response plan. These Regional Centers will form the network that will determine whether or not the State plan will function properly.

The basic needs of these centers will be adequate communications and up-to-date maps of the streams within their respective regions. These Regional Centers will be used to relay situation reports and support requests from the State-On-Scene Coordinator to the State Response Center. The critiques of actual emergency responses should tell whether or not the location and/or facilities of the Regional Centers are proper.

The State-On-Scene Coordinator should be in continuous contact with the Regional Center. This will ensure prompt and efficient response actions. The Regional Centers could be

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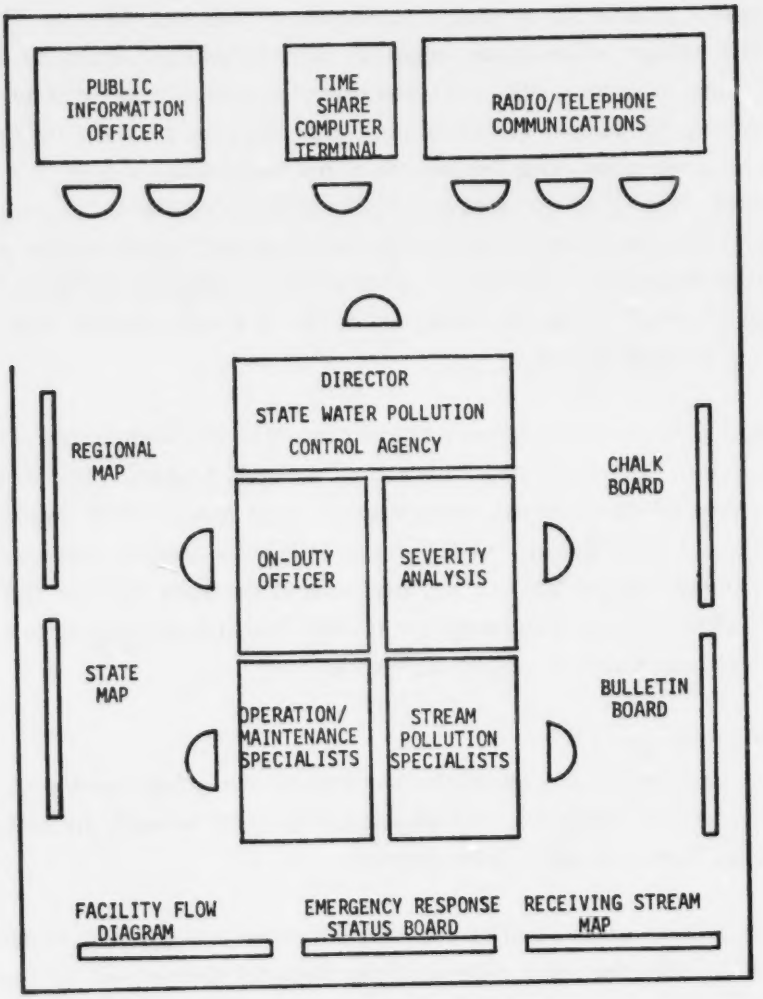

FIGURE NO. 2
SAMPLE FLOOR PLAN
STATE EMERGENCY RESPONSE CENTER
(Similar to floor plan in Virginia's
"Natural Disaster Assistance Relief Plan")

located at the State Water Pollution Control Agency's regional offices as these locations are generally selected for communication capability and proximity to areas of responsibility. The Regional Centers could be staffed by the agency's personnel in that region or by personnel from the State headquarters.

SECTION VII
REPORTING SYSTEMS

Introduction

A legal requirement for reporting spills of raw or inadequately treated municipal wastewater will ensure that spills are reported promptly. To aid the personnel responsible for this reporting, the State's emergency response program should be widely publicized among municipal employees.

Local Reporting

All municipal treatment facilities should be provided with the names and telephone numbers of the State Water Pollution Control Agency regional representatives and a number that can be called 24 hours a day, 7 days a week to report emergencies. The initial call for reporting a spill should be made to the State Water Pollution Control Agency regional representative. Figure No. 3 is a sample State map showing the regions within the State and listing the State Water Pollution Control Agency representative for each region. If persons reporting spills are unable to contact their regional representative, the 24-hour number at the State headquarters should be called. The operator who receives the call should have a checklist to use in obtaining the basic information required for follow-up by a qualified member of the emergency response staff. Figure No. 4 shows samples of forms used for receipt of spill reports. Responsibilities and time lag for reporting spill conditions should be clearly defined. Figure No. 5 shows a typical telephone call list.

Regional Reporting

The regional response staff in the area where the emergency occurs should have a working knowledge of the characteristics of all treatment systems for which it is responsible. This staff should have a good working arrangement with the key personnel from each of these systems.

Flow charts complete with names, titles, telephone numbers, and alternates should be produced, widely circulated and continually updated to assist in the reporting of an emergency.

Any regional staff member at a spill site must ensure that his report on the severity of the emergency is relayed promptly and accurately to the Regional Center.

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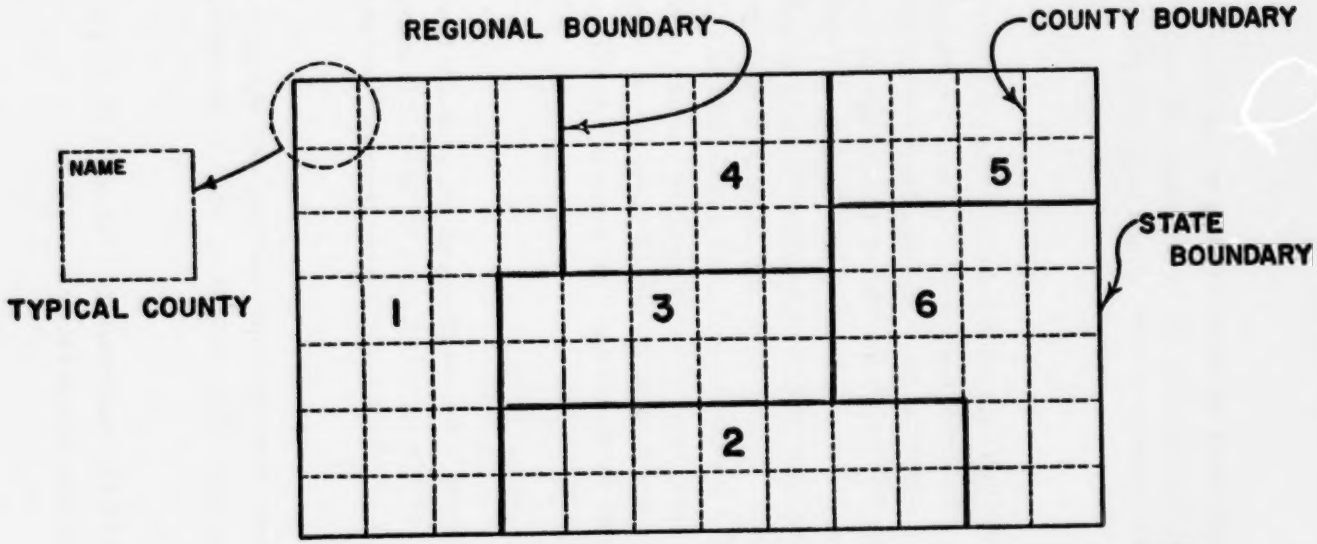
STATE WATER POLLUTION CONTROL AGENCY

STATE MAP SHOWING REGIONAL BREAKDOWN FOR SPILL REPORTING



REGION NO.	AGENCY REPRESENTATIVE NAME	ADDRESS	PHONE OFFICE	PHONE HOME
1				
2				
3				
4				
5				
6				

FIGURE NO. 3
SAMPLE STATE MAP
SHOWING REGIONAL BREAKDOWN FOR SPILL REPORTING
(Similar to map used in Kansas)

MUNICIPAL WASTEWATER SPILL REPORT*

NAME OF FACILITY _____

LOCATION (CITY) _____ (RIVER BASIN) _____

OWNER _____ TELEPHONE _____ (AREA CODE)

PERSON REPORTING SPILL _____

DATE REPORTED _____ (DAY) (MONTH) (YEAR) TIME REPORTED _____

SPILL STARTED (DATE) _____ (DAY) (MONTH) (YEAR) (TIME) _____

SPILL STOPPED (DATE) _____ (DAY) (MONTH) (YEAR) (TIME) _____

SPILL VOLUME _____ GALLONS IF SPILL STOPPED

SPILL RATE _____ MGD IF SPILL CONTINUING

IF SPILL CONTINUING, ESTIMATED DURATION _____ HOURS

ESTIMATE TREATMENT AS PERCENT OF NORMAL _____ %

IS CHLORINATION BEING PROVIDED _____ YES _____ NO

DESCRIBE CONDITIONS SURROUNDING SPILL (POWER FAILURE, EQUIPMENT BREAKDOWN, BROKEN LINE, ETC.) _____

ACTION TAKEN TO STOP SPILL AND PREVENT REOCCURENCE _____

ASSISTANCE REQUIRED _____

OWNER'S PLAN FOR SAMPLING AT SPILL SITE _____

STATE WATER POLLUTION CONTROL AGENCY REPRESENTATIVE TAKING REPORT _____

_____ (SIGNATURE)

*Similar to form used in West Virginia

FILE REFERENCE: _____

STATE WATER POLLUTION CONTROL AGENCY

MUNICIPAL WASTEWATER SPILL REPORT*

DATE: _____ TIME: _____ A.M. _____ P.M.

MUNICIPALITY _____

COUNTY _____

SANITATION DISTRICT _____

TREATMENT FACILITY ☐ COLLECTION SYSTEM ☐

REPORTED BY: _____ PHONE NO. _____

NATURE OF PROBLEM: _____

SPILL LOCATION: _____

CORRECTIVE ACTION: _____

TIME INITIATED: _____ ESTIMATED COMPLETION: _____

REMARKS: _____

REPORT RECEIVED BY: _____

*Similar to form used in Colorado

FIGURE NO. 4
SAMPLE SPILL REPORT FORMS

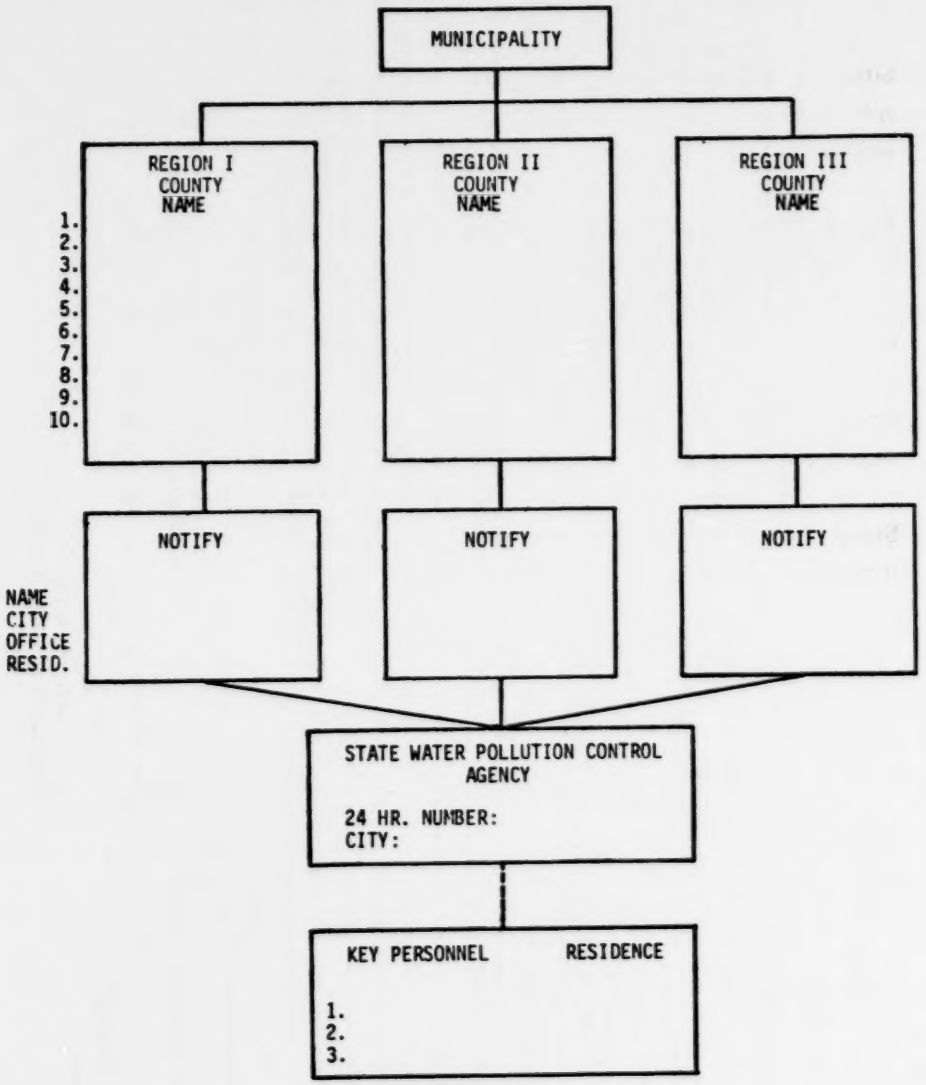


FIGURE NO. 5
SAMPLE TELEPHONE CALL LIST
(Format similar to that used by West Virginia)

Reporting Format

To avoid confusion, the emergency response plan should call for all reports from the spill site to follow a specific format. The SITREP (Situation Report) format follows:

1. **Situation** – Should include location, what happened, strength and volume of wastewater spilled, extent of emergency, success of emergency response actions.

2. **Action** – Summary of all actions taken by the municipality, State, or by others.

3. **Plans** – All planned actions by municipality, State, or any others.

4. **Recommendations** – Any recommendations pertaining to the response that the State-On-Scene Coordinator has.

5. **Status** – Should indicate whether emergency condition has ended or, if continuing, should give details of conditions existing.

SECTION VIII
COST RECOVERY

General

A revolving fund to reimburse the State for money expended in containing and removing pollution from State waters has been established by several States. Portions of several States' laws concerning these funds follow:

INDIANA

(Special Fund) All moneys collected pursuant to Section 1 of this chapter shall be remitted by the officials collecting the same to the Treasurer of the State of Indiana, and credited to a special account of the State to be established by the Auditor of State and to be known as the "Environmental Management Special Fund." It is hereby declared to be the policy of the State of Indiana that the moneys on deposit in the Environmental Management Special Fund shall be used exclusively for the purposes of the Board and the Agencies. (Section 1, IC 1971, Title 13, Chapter 12, Section 2)

OREGON

449.167 Oil Spillage Control Fund; sources; uses.

1. All penalties recovered under ORS 449.995 shall be paid into an Oil Spillage Control Fund, which account is hereby established within the General Fund, to be administered by the department for the advancement of costs incurred in carrying out cleanup activities as outlined in subsections (1), (2) and (3) of ORS 449.163 and for the rehabilitation of affected fish and wildlife as provided under ORS 449.103.

2. With the approval of the Commission, the moneys in the Oil Spillage Control Fund may be invested as provided by ORS 293.701 to 293.776 and earnings from such investment shall be credited to the fund.

3. The Oil Spillage Control Fund shall not be used for any purpose other than that for which the fund was created. (Oregon Statutes, Ch. 449, 1971 Replacement Part)

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CONNECTICUT

Any person, firm or corporation which directly or indirectly causes pollution and contamination of any waters of the State through the discharge, spillage, seepage, filtration or otherwise of oil or any petroleum or chemical liquid or product shall be liable for all costs and expenses incurred by said (commission) Commissioner in containing and removing such pollution and contamination. Upon request of the (chairman of the water resources commission) Commissioner, the attorney general shall bring a civil action to recover all such costs and expenses. All costs and expenses so recovered shall be applied

1. To reimburse the State for all sums of money advanced or expended by it under sections 25-54bb to 25-54hh, inclusive, AS HEREIN AMENDED, in containing and removing any such pollution and contamination.

2. For the general purposes of said sections without further appropriation.

(H.B. No. 9254, Sec. 104)

MASSACHUSETTS

It shall be the duty and responsibility of the division to enhance the quality and value of water resources and to establish a program for the prevention, control and abatement of water pollution. Said division will:

(10) Undertake immediately, whenever there is spillage, seepage or other discharge of oil into any of the waters of the commonwealth or into any offshore waters which may result in damage to the waters, shores or natural resources utilized or enjoyed by citizens of the commonwealth to cause said spillage, seepage or discharge to be contained and removed by whatever method it considers best . . .

The division shall determine the person responsible for causing such spillage, seepage or discharge and the names of all persons who owned or controlled the oil or who owned or controlled or leased the vessel, tank, pipe, hose or other container in which the oil was located when the spillage, seepage or discharge occurred. Said persons shall be jointly and severally liable to the commonwealth for all damages done to natural and recreational resources, including all costs of restoring damaged areas to their original condition, and to any other person for any damages to his real and personal property . . .

Upon request of the director, the attorney general shall bring an action to recover all costs and expenses incurred for such investigation, containment, removal and restoration.

Such costs and expenses shall be recovered in an action of tort, and shall be credited to the account from which said sums of money had been advanced and may, subject to appropriation, be expended by the division for the purposes set forth in this clause. In any such action the commonwealth may also seek recovery for all loss and damage to the natural and recreational resources of the commonwealth. (Ch. 21, Sec. 27, Clean Waters Act as amended through the Acts of 1970)

CALIFORNIA

Article 3. State Water Pollution Cleanup and Abatement Account

13440. There is in the State Water Quality Control Fund the State Water Pollution Cleanup and Abatement Account (hereinafter called the "account"), to be administered by the State Board.

13441. There is to be paid into the account all moneys from the following sources:

(a) All moneys appropriated by the legislature for the account.

(b) All moneys contributed to the account by any person and accepted by the State Board.

(c) One-half of all moneys collected by way of criminal penalty and all moneys collected civilly under any proceeding brought pursuant to any provision of this division.

(d) All moneys collected by the State Board for the account under Section 13304.

All moneys paid into the account are available without regard to fiscal years, for expenditure by the State Board in accordance with the provisions of this article.

13441.5 The State Treasurer, when requested by the State Board and approved by the Director of Finance, shall transfer moneys in the nature of a loan from the State Water Quality Control Fund to the account created pursuant to Section 13440, which shall be repayable from the account to such fund; provided, that the moneys transferred from the fund to the account shall not exceed the sum of twenty-five thousand dollars ($25,000) at any one time.

(Added by Stats. 1970, Ch. 918)

13442. Upon application by a public agency with authority to clean up a waste or abate the effects thereof, the State Board may order moneys to be paid from the account to the agency to assist it in cleaning up the waste or abating its effects on waters of the State. The agency shall not become liable to the State Board for repayment of such moneys, but this shall not be any defense to an action brought pursuant to subdivision (b) of Section 13304 for the recovery of moneys paid hereunder.

(Porter-Cologne Water Quality Control Act)

System of Fines

All States have a system of penalties and fines for violations of water pollution control laws and regulations. These existing systems can be used to help enforce the requirements for reporting spills of raw or inadequately treated municipal wastewater. Fines collected can be placed in a revolving fund for use in cleaning up spills. Portions of several States' laws dealing with penalties and fines follow:

CONNECTICUT

Any person or municipality which knowingly violates any provision of this charter shall forfeit to the State a sum not to exceed one thousand dollars, to be fixed by the court, for each offense. Each violation shall be a separate and distinct offense, and, in case of a continuing violation, each day's continuance thereof shall be deemed to be a separate and distinct offense. (Public Act 872, House Bill No. 9254, Sec. 93)

FLORIDA

Violation is punishable by a civil penalty of not more than $5,000 for the first offense and of not more than $5,000 for each offense thereafter. Each day during any portion of which such violation occurs constitutes a separate offense. (Air and Water Pollution Control Act, Chapter 403.161)

GEORGIA

. . .Any person violating any provision of this Act or failing, neglecting, or refusing to comply with any final order of the Board issued as herein provided shall be liable to a penalty not to exceed $1,000 for said violation and an additional penalty not to exceed $500 for each day during which such violation continues, and, in addition thereto, such person may be enjoined from continuing such violation as hereinbefore provided . . . (Georgia Water Quality Control Act, as amended through 1971, Section 22A)

INDIANA

Sect. 1 (Civil Penalties) (a) Any person who violates any provision of this article, or any regulation or standard adopted pursuant to this article, or who violates any determination or order of the Board or an agency made pursuant to this article, shall be liable to a penalty not to exceed ten thousand dollars ($10,000) for the first day of any violation and an additional penalty not to exceed one thousand dollars ($1,000) for each additional day of continuing violation . . . (Section 1, IC 1971, Title 13, Chapter 13)

The systems of fines and penalties used by different States vary widely as illustrated by the four States cited above. The concept of using each day of continued violation as a separate offense is used by most States. Placing an upper limit on fines is a just method to enable an owner to estimate his maximum fine. The minimum fine, if used, should be low enough to achieve maximum flexibility in the system. The exact monetary values for the maximum and minimum fines should be established by each State based on their individual experiences with pollution incidents.

Revenues from direct reimbursable costs and fines should be placed in a revolving fund to provide public agencies with money to pay for cleanup activities. Reimbursable costs include travel expenses and the cost of supplies procured specifically for response to an incident. Funds should not be used for costs which would have been incurred during normal operations and functions performed in support of any enforcement actions.

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SECTION X
APPENDICES

A PERTINENT FEDERAL STATUTES

B STATE LAW/REGULATION TABULATION

C SAMPLE WASTEWATER TREATMENT SYSTEM EMERGENCY RESPONSE PAMPHLET

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APPENDIX A
PERTINENT FEDERAL STATUTES

INTRODUCTION

This Appendix contains excerpts from several Federal statutes related to water pollution control. These excerpts provide background information on the Federal Government's attempt to minimize the environmental, public health, and public welfare impact of spills in the nation's waters. The excerpts in this section are from the following statutes:

Federal Water Pollution Control Act Amendments of 1972:
Pertinent features cited under Section 311, Oil and Hazardous Substance Liability, primarily deal with granting the President the authority to prepare and publish a National Contingency Plan for removal of oil discharges and hazardous substances from waters of the United States. Other features tabulated include: requirement to notify appropriate U.S. agency in the event of a discharge, definition of "owner or operator" and "offshore or onshore facility," and granting of authority to the President to designate hazardous materials.

Section 301, Effluent Limitations, establishes the concept of effluent standards for municipal wastewater treatment facilities. Section 402, National Pollutant Discharge Elimination System, outlines the National Discharge Permit concept. Section 304 (h) gives the Environmental Protection Agency the responsibility for establishing guidelines for owners applying for permits and for States setting up permit programs.

Executive Order 11548: This order delegates to the Secretary of the Interior the responsibility and authority to carry out provisions of various subsections of Section 311 of the Water Pollution Control Act Amendments of 1972 (formerly Sections 11 and 12 of original act).

Reorganization Plan No. 3 of 1970: This plan establishes the Environmental Protection Agency and transfers to EPA all functions formerly administered by the Federal Water Quality Administration.

Designation of Hazardous Substances EPA Notice of Proposed Rule Making: The pertinent feature cited from this document is the fact that

digested sewage sludge and raw undigested sewage sludge are designated as hazardous substances.

FEDERAL STATUTE TABULATION

The following is a tabulation of the excerpts from Federal Statutes pertinent to the emergency response planning aspects of water pollution control:

STATUTE

Federal Water Pollution Control Act Amendments of 1972.

AUTHORIZED ACTION

TITLE III
STANDARDS AND ENFORCEMENT

OIL AND HAZARDOUS SUBSTANCE LIABILITY

Sec. 311.

(a) For the purpose of this section, the term--

(2) discharge includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping;

(6) owner or operator means (A) is the case of a vessel, any person owning, operating, or chartering by demise, such vessel, and (B) in the case of an onshore facility, and an offshore facility, any person owning or operating such onshore facility or offshore facility, and (C) in the case of any abandoned offshore facility, the person who owned or operated such facility immediately prior to such abandonment;

(7) person includes an individual, firm, corporation, association and a partnership;

(8) remove or removal refers to removal of the oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches;

(10) onshore facility means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under, any land within the United States other than submerged land;

(11) offshore facility means any facility of any kind located in, on, or under, any of the navigable waters of the United States other than a vessel or a public vessel;

(14) hazardous substance means any substance designated pursuant to subsection (b) (2) of this section.

(b) (1) The Congress hereby declares that it is the policy of the United States that there should be no discharges of oil or hazardous substances into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone.

(2) (A) The Administrator shall develop, promulgate, and revise as may be appropriate, regulations designating as hazardous substances, other than oil as defined in this section, such elements and compounds which, when discharged in any quantity into or upon the navigable waters of the United States or adjoining shorelines or the waters of the contiguous zone, present an imminent and substantial danger to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, shorelines, and beaches.

STATUTE	AUTHORIZED ACTION
Federal Water Pollution Control Act Amendments of 1972 (Continued)	(5) Any person in charge of a vessel or of an onshore facility or an offshore facility shall, as soon as he has knowledge of any discharge of oil or a hazardous substance from such vessel or facility in violation of paragraph (3) of this subsection, immediately notify the appropriate agency of the United States Government of such discharge. Any such person who fails to notify immediately such agency of such discharge shall, upon conviction, be fined not more than $10,000, or imprisoned for not more than one year, or both. Notification received pursuant to this paragraph or information obtained by the exploitation of such notification shall not be used against any such person in any criminal case, except a prosecution for perjury or for giving a false statement. (c) (1) Whenever any oil or a hazardous substance is discharged, into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, the President is authorized to act to remove or arrange for the removal of such oil or substance at any time, unless he determines such removal will be done properly by the owner or operator of the vessel, onshore facility, or offshore facility from which the discharge occurs. (2) Within sixty days after the effective date of this section, the President shall prepare and publish a National Contingency Plan for removal of oil and hazardous substances, pursuant to this subsection. Such National Contingency Plan shall provide for efficient, coordinated, and effective action to minimize damage from oil and hazardous substance discharges including containment, dispersal, and removal of oil and hazardous substances, and shall include, but not be limited to-- (A) assignment of duties and responsibilities among Federal departments and agencies in coordination with State and local agencies, including, but not limited to, water pollution control, conservation, and port authorities; (B) identification, procurement, maintenance, and storage of equipment and supplies; (C) establishment or designation of a strike force consisting of personnel who shall be trained, prepared, and available to provide necessary services to carry out the Plan, including the establishment at major ports, to be determined by the President, of emergency task forces of trained personnel, adequate oil and hazardous substance pollution control equipment and material, and a detailed oil and hazardous substance pollution prevention and removal plan; (E) establishment of a national center to provide coordination and direction for operations in carrying out the Plan; (F) procedures and techniques to be employed in identifying, containing, dispersing, and removing oil and hazardous substances. (G) a schedule, prepared in cooperation with the States, identifying (i) dispersants and other chemicals, if any, that may be used in carrying out the Plan, (ii) the waters in which such dispersants and chemicals may be used, and (iii) the quantities of such dispersant or

Federal Water Pollution Control Act Amendments of 1972 (Continued)

chemical which can be used safely in such waters, which schedule shall provide in the case of any dispersant, chemical, or waters not specifically identified in such schedule that the President, or his delegate, may, on a case-by-case basis, identify the dispersants and other chemicals which may be used, the waters in which they may be used, and the quantities which can be used safely in such waters; and

(H) a system whereby the State or States affected by a discharge of oil or hazardous substance may act where necessary to remove such discharge and such State or States may be reimbursed from the fund established under subsection (k) of this section for the reasonable costs incurred in such removal.

(2) Any owner or operator of a vessel or an onshore facility or an offshore facility and any other person subject to any regulation issued under paragraph (1) of this subsection who fails or refuses to comply with the provisions of any such regulation, shall be liable to a civil penalty of not more than $5,000 for each such violation. Each violation shall be a separate offense. The President may assess and compromise such penalty. No penalty shall be assessed until the owner, operator or other person charged shall have been given notice and an opportunity for a hearing on such charge. In determining the amount of the penalty, or the amount agreed upon in compromise, the gravity of the violation, and the demonstrated good faith of the owner, operator, or other person charged in attempting to achieve rapid compliance, after notification of a violation, shall be considered by the President.

(k) There is hereby authorized to be appropriated to a revolving fund to be established in the Treasury not to exceed $35,000,000 to carry out the provisions of subsections (c), (d), (i), and (1) of this section. Any other funds received by the United States under this section shall also be deposited in said fund for such purposes. All sums appropriated to, or deposited in, said fund shall remain available until expended.

EFFLUENT LIMITATIONS

Sec. 301.

(a) Except as in compliance with this section and sections 302, 306, 307, 318, 402, and 404 of this Act, the discharge of any pollutant by any person shall be unlawful.

(b) In order to carry out the objective of this Act there shall be achieved–

(1) (B) for publicly owned treatment works in existence on July 1, 1977, or approved pursuant to section 203 of this Act prior to June 30, 1974 (for which construction must be completed within four years of approval), effluent limitations based upon secondary treatment as

STATUTE	AUTHORIZED ACTION
Federal Water Pollution Control Act Amendments of 1972 (Continued)	defined by the Administrator pursuant to section 304(d) (1) of this Act; or, (2) (B) not later than July 1, 1983, compliance by all publicly owned treatment works with the requirements set forth in section 201 (g) (2) (A) of this Act. (d) Any effluent limitation required by paragraph (2) of subsection (b) of this section shall be reviewed at least every five years and if appropriate, revised pursuant to the procedure established under such paragraph. (e) Effluent limitations established pursuant to this section or section 302 of this Act shall be applied to all point sources of discharge of pollutants in accordance with the provisions of this Act. **INFORMATION AND GUIDELINES** Sec. 304. (h) The Administrator shall (1) within sixty days after the enactment of this title promulgate guidelines for the purpose of establishing uniform application forms and other minimum requirements for the acquisition of information from owners and operators of point sources of discharge subject to any State program under section 402 of this Act, and (2) within sixty days from the date of enactment of this title promulgate guidelines establishing the minimum procedural and other elements of any State program under section 402 of this Act which shall include: (A) monitoring requirements; (B) reporting requirements (including procedures to make information available to the Public; (C) enforcement provisions; and (D) funding, personnel qualifications, and manpower requirements (including a requirement that no board or body which approves permit applications or portions thereof shall include, as a member, any person who receives, or has during the previous two years received, a significant portion of his income directly or indirectly from permit holders or applicants for a permit. **INSPECTIONS, MONITORING AND ENTRY** Sec. 308. (a) Whenever required to carry out the objective of this Act, including, but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of

Federal Water Pollution Control Act Amendments of 1972 (Continued)

performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, and 504 of this Act--

(A) the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe, and (v) provide such other information as he may reasonably require; and

FEDERAL ENFORCEMENT

Sec. 309.

(a) (3) Whenever on the basis of any information available to him the Administrator finds that any person is in violation of section 301, 302, 306, 307, or 308 of this Act, or is in violation of any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by him or by a State, he shall issue an order requiring such person to comply with such section or requirement, or he shall bring a civil action in accordance with subsection (b) of this section.

TITLE IV
PERMITS AND LICENSES

CERTIFICATION

Sec. 401.

(a) (1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 301, 302, 306, 307 of this Act.

NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM

Sec. 402.

(a) (1) Except as provided in sections 318 and 404 of this Act, the Administrator may, after opportunity for public hearing, issue a

STATUTE	AUTHORIZED ACTION
Federal Water Pollution Control Act Amendments of 1972 (Continued)	permit for the discharge of any pollutant, or combination of pollutants, notwithstanding section 301 (a), upon condition that such discharge will meet either all applicable requirements under sections 301, 302, 306, 307, 308, and 403 of this Act, or prior to the taking of necessary implementing actions relating to all such requirements, such conditions as the Administrator determines are necessary to carry out the provisions of this Act. (2) The Administrator shall prescribe conditions for such permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, and such other requirements as he deems appropriate. (3) The permit program of the Administrator under paragraph (1) of this subsection, and permits issued thereunder, shall be subject to the same terms, conditions, and requirements as apply to a State permit program and permits issued thereunder under subsection (b) of this section . . . . . (b) At any time after the promulgation of the guidelines required by subsection (h) (2) of section 304 of this Act, the Governor of each State desiring to administer its own permit program for discharges into navigable waters within its jurisdiction may submit to the Administrator a full and complete description of the program it proposes to establish and administer under State law or under an interstate compact. In addition, such State shall submit a statement from the attorney general (or the attorney for those State water pollution control agencies which have independent legal counsel), or from the chief legal officer in the case of an interstate agency, that the laws of such State, or the interstate compact, as the case may be, provide adequate authority to carry out the described program. **PERMITS FOR DREDGED OR FILL MATERIAL** Sec. 404. (a) The Secretary of the Army, acting through the Chief of Engineers, may issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites. **DISPOSAL OF SEWAGE SLUDGE** Sec. 405. (b) The Administrator shall issue regulations governing the issuance of permits for the disposal of sewage sludge subject to this section. Such regulations shall require the application to such disposal of each criterion, factor, procedure, and requirement applicable to a

STATUTE	AUTHORIZED ACTION
Federal Water Pollution Control Act Amendments of 1972 (Continued)	permit issued under section 402 of this title, as the Administrator determines necessary to carry out the objective of this Act. (c) Each State desiring to administer its own permit program for disposal of sewage sludge within its jurisdiction may do so if upon submission of such program the Administrator determines such program is adequate to carry out the objective of this Act.

STATUTE	AUTHORIZED ACTION
Executive Order 11548 – Delegating functions of the President under the Federal Water Pollution Control Act, as amended	Section 1. Delegations to the Secretary of the Interior. There is hereby delegated to the Secretary of the Interior responsibility and authority (f) to carry out the provisions of subsection (a) (1) of section 12, of the Act, relating to the designation of hazardous substances, other than oil, which when discharged into or upon the navigable waters of the United States or adjoining shorelines of the contiguous zone, present an imminent and substantial danger to public health or welfare; (g) in consultation with the Secretary of Transportation, to carry out the provisions of subsection (a) (2) of section 12 of the Act, relating to the establishment of recommended methods for the removal of hazardous substances within the meaning of subsection (a) (1) of section 12 of the Act. Section 2. Delegations to the Secretary of Transportation responsibility and authority. (c) to administer the revolving fund established pursuant to subsection (k) of section 11 of the Act; (e) in consultation with the Secretary of the Interior, to carry out the provisions of subsection (g) of section 12 of the Act, including the preparation of a report for submission by the President to the Congress. Section 4. Delegation to the Council on Environmental Quality. (a) There is hereby delegated to the Council of Environmental Quality the responsibility and authority to carry out the provisions of subsection (c) (2) of section 11 of the Act, providing for the preparation, publication, revision or amendment of a National Contingency Plan for the removal of oil (hereinafter referred to as the National Contingency Plan). Section 5. Other delegations. (a) There is hereby delegated to the Secretary of the Interior and to the Secretary of Transportation, respectively, in and for the waters and areas assigned to each in section 306.2 of the National Contingency Plan (35 F.R. 8511) responsibility and authority. (5) to carry out the provisions of subsection (d) of section 12 of the Act, relating to the removal of discharged hazardous substances. Section 6. Agency to Receive Notices of Discharges of Oil or Hazardous Substances. The Coast Guard is hereby designated the "appropriate agency" for the purpose of receiving the notice of

STATUTE	AUTHORIZED ACTION
Executive Order 11548 (Continued)	discharge of oil required by subsection (b) (4) of section 11 of the Act and for the purpose of receiving the notice of discharge of any hazardous substance required by subsection (c) of section 12 of the Act. The Commandant of the Coast Guard shall issue regulations implementing this designation. Section 9. Reorganization Plan No. 3 of 1970. Upon the taking effect of Reorganization Plan No. 3 of 1970, the responsibility and authority conferred upon the Secretary of Interior by this order, including the authority conferred by reason of his designation in the National Contingency Plan, and including the responsibility to consult with other officers, shall vest in the Administrator of the Envirionmental Protection Agency: Provided, that the Administrator shall thereafter consult with the Secretary of the Interior regarding the responsibility and authority delegated by section 1 (a) of this order and officers who by this order are required to consult with the Secretary of Interior shall consult with the Administrator of the Environmental Protection Agency.

STATUTE	AUTHORIZED ACTION
Reorganization Plan No. 3 of 1970	**ENVIRONMENTAL PROTECTION AGENCY**

Section 1. Establishment of Agency. (a) There is hereby established the Environmental Protection Agency, hereinafter referred to as the "Agency."

Section 2. Transfers to Environmental Protection Agency. (a) There are hereby transferred to the Administrator:

(1) All functions vested by law in the Secretary of the Interior and Department of the Interior which are administered through the Federal Water Quality Administration, all functions which were transferred to the Secretary of the Interior by Reorganization Plan No. 2 of 1966 (80 Stat. 1608), and all functions vested in the Secretary of the Interior or the Department of the Interior by the Federal Water Pollution Control Act or by provisions of law amendatory or supplementary thereof.

STATUTE	AUTHORIZED ACTION
Environmental Protection Agency, Designation of Hazardous Substances Notice of Proposed Rule Making (40 CFR Part 118)	Notice is hereby given that the Administrator, Environmental Protection Agency, pursuant to the authority contained in section 12(a) (1) of the Federal Water Pollution Control Act [33 U.S.C. 1162(a) (1)] which was delegated to the Secretary of the Interior by the President in Executive Order No. 11548 (Section 9) dated July 20, 1970 (35 F.R. 11677) and transferred to the Administrator by Reorganization Plan No. 3, 1970, proposes to adopt a new Part 118. The term "discharge" is defined by the statute as including "any spilling, leaking, pumping, pouring, emitting, emptying or dumping." While this definition covers continuous as well as noncontinuous spill-type discharges, this proposed regulation would only require notification or noncontinuous spill-type discharges. Notification of the discharge of a designated hazardous polluting substance is required regardless of the quantity discharged or the expected harm. Section 2 Definitions (g) "Mixture" means mixtures of any kind or in any form, including, but not limited to, mixtures in containers and vessels and waste water effluents. Section 3 Designation of Hazardous Substances (3) . . . Sludge, Digested Sewage Sludge, Raw, Undigested Sewage For the purpose of section 12 (c) of the Federal Pollution Control Act, all of the elements, compounds or their isomers, ions or mixtures included within the provisions of section 3 above are hazardous substances.

APPENDIX B
STATE LAW/REGULATION TABULATION

INTRODUCTION

For each State, the following items have been tabulated: Statutory (State law) requirement to report discharges of raw or partially treated municipal wastewater; State Water Pollution Control Agency regulation requiring reporting of municipal wastewater spills; State certification/permit program for municipal discharges; and a system of penalties and/or fines for water pollution incidents. A listing of State Water Pollution Control Laws used to develop these tables is included in this Appendix.

PURPOSE

The purpose of the State Law/Regulation tabulation is to illustrate a legal requirement for reporting a spill of raw or inadequately treated municipal wastewater to an appropriate State Water Pollution Control Agency. Table 1 – State Law Tabulation shows majority of State Legislatures have not deemed it necessary to include reporting requirements in their water pollution control law. However, most laws do give the State Water Pollution Control Agencies the power to make such regulations as they feel are necessary to maintain the water quality standards of the State. The table also shows that most State Water Pollution Control Agencies have adopted regulations that require spill reporting.

The permit systems now employed by many of the States and now required by EPA can provide a valuable mechanism for helping to establish spill reporting criteria. The system can also be used to ensure municipal wastewater treatment system owners develop acceptable local emergency operating and response programs.

NOTE: All State Water Pollution Control Agencies were contacted and asked for copies of their current water pollution control laws and agency regulations. Water pollution control legislation is constantly changing at both the State and Federal levels. The information contained in this Appendix reflects each State's status at the time of this manual's development.

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TABLE 1

STATE LAW TABULATION

State	Statutory requirement to report discharges of raw or partially treated municipal wastewater	Water Pollution Control Agency regulation requires reporting of municipal wastewater spills	State has a certification/ permit system for municipal discharges	System of fines and/or penalties for municipal water pollution incidents
Alabama			X	X
Alaska			X	X
Arizona			X	X
Arkansas			X	X
California			X	X
Colorado				X
Connecticut		X	X	X
Delaware				
District of Columbia				
Florida		X	X	X
Georgia		X	X	X
Hawaii		X	X	X
Idaho		X	X	X
Illinois			X	X
Indiana		X	X	X
Iowa		X	X	X
Kansas		X	X	X
Kentucky		X	X	X
Louisiana			X	X
Maine		X	X	X
Maryland			X	X
Massachusetts		X	X	X
Michigan			X	X
Minnesota				
Mississippi			X	X
Missouri			X	X
Montana			X	X
Nebraska		X	X	X
Nevada			X	X
New Hampshire			X	X
New Jersey		X	X	X
New Mexico				X
New York	X		X	X
North Carolina			X	X
North Dakota		X		X
Ohio		X	X	X
Oklahoma		X	X	X
Oregon		X	X	X
Pennsylvania				
Rhode Island	X		X	X
South Carolina			X	X
South Dakota		X	X	X
Tennessee			X	X
Texas	X	X	X	X
Utah		X	X	X
Vermont	X		X	X
Virginia		X	X	X
Washington		X	X	X
West Virginia		X	X	X
Wisconsin				X
Wyoming			X	X

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STATE	LAW	REFERENCE	ADMINISTERING AGENCY
Alabama	Water Pollution Control Act	Act No. 1260, S79, Laws of 1971 Regular Session, Sec. 4(h) and Sec. 4(O).	Water Improvement Commission State Office Building Montgomery, Alabama 36104
Alaska	Water Pollution Control Act	Senate Bill 75, Chapter 120, Laws 1971 (Sec. 46.03.100 and Sec. 46.03.760).	Department of Environmental Conservation Pouch 0 Juneau, Alaska 99801
Arizona	Water Quality Control Act	Revised Statutes Ch. 16, Article 1, 36-1851 et seq. (Amended Law 1971)	Water Quality Control Council State Board of Health Environmental Health Services 1624 West Adams Street Phoenix, Arizona 85007
Arkansas	Water & Air Pollution Control Act	Act 472 of 1949 as amended by Act 183 of 1965 (Section 82-901 et seq., Ark. Stats.)	Department of Pollution Control & Ecology 1100 Harrington Avenue Little Rock, Arkansas 72202
California	Porter-Cologne Water Quality Control Act	Division 7, Ch. 4, Art. 4, Sec. 13260 and Ch. 5, Art. 5, Sec. 13350 (as amended through 1971)	Water Resources Control Board Room 1015 Resources Building 1416 Ninth Street Sacramento, California 95814
Colorado	Water Pollution Control Act	Chapter 66 – Article 28 (1970 Amendment – Senate Bills No. 35 and and 45) (1971 Amendment – Senate Bill No. 298)	Department of Health Water Pollution Control Division 4210 East 11th Avenue Denver, Colorado 80220
Connecticut	Clean Water Act	Public Act 872, Laws 1971 H.B. 9254, Approved June 25, 1971	Department of Environmental Protection State Office Building Room 539 Hartford, Connecticut 06115
Delaware	Water Pollution Control Laws		Department of Natural Resources and Environmental Control Water and Air Resources Comm. P. O. Box 916 Dover, Delaware 19901
District of Columbia	Water Pollution Control Law		Department of Environmental Ser. Environmental Health Adminis. Water Resources Management Adm. Presidential Building 415 12th Street, N.W. Washington, D.C. 20004
Florida	Air and Water Pollution Control Act	Chapter 403, Florida Statutes 1967 (as amended through 1971)	Pollution Control Board Department of Pollution Control Tallahassee Bank Building Suite 300 Tallahassee, Florida 32301
Georgia	Water Quality Control Act	Act No. 870 (H.B. 730) (as amended through 1971)	Water Quality Control Board 47 Trinity Avenue, S.W., Room 609 Atlanta, Georgia 30334

STATE	LAW	REFERENCE	ADMINISTERING AGENCY
Hawaii	Water Pollution Control Laws	Hawaii, Revised Statutes as amended by Act 100, 1972	Department of Health (Environmental Health Division) Board of Health P. O. Box 3378 Honolulu, Hawaii 96801
Idaho	Environmental Protection and Health Act of 1972	House Bill No. 610, as amended in the Senate by State Affairs Committee	Board of Environmental Protection and Health State House Boise, Idaho 83707
Illinois	Environmental Protection Act	Title 4, Section 12b; Title 12, Section 42 (as amended through 1971)	Environmental Protection Agency Pollution Control Board 2200 Churchill Road Springfield, Illinois 62706
Indiana	Stream Pollution Control Law	Ch. 214, Acts of 1943, as amended by Ch. 132, Acts of 1945, Ch. 64, Acts of 1957, as amended; Senate Enrolled Act No. 100, An Act to Amend IC 1971, Title 13.	Stream Pollution Control Board 1330 West Michigan Street Indianapolis, Indiana 46206
Iowa	Water Pollution Control Law		Water Pollution Control Comm. Department of Health Lucas State Office Bldg. Des Moines, Iowa 50319
Kansas	Water Pollution Control Law	K.S.A. 65-161 et seq. (1967)	Department of Health Board of Health Topeka, Kansas 66612
Kentucky	Water Pollution Control Law	Ch. 224 (KRS 224.010 to 224.130 and 224.990), 1950 as amended by H.B. 370 (3/30/70)	Water Pollution Control Comm. 275 East Main Street Frankfort, Kentucky 40601
Louisiana	Stream Control Commission Acts	Title 56, Ch. 3, Part 1, Section 1431 et seq. (as amended through 1971)	Stream Control Commission Wildlife & Fisheries Comm. Department of Health P. O. Drawer FC University Station Baton Rouge, Louisiana 70803
Maine	Water Pollution Control Law	Title 38, Ch. 3, Revised Statutes of 1964, as amended 1971	Environmental Improvement Comm. State House Augusta, Maine 04330
Maryland	Water Pollution Control Laws	Article 43 (Sec. 387 to 427) Annotated Code of Maryland as amended by Laws 1970	*Department of Natural Resources *Department of Water Resources Department of Health & Mental Hygiene 2305 North Charles Street Baltimore, Maryland 21218 *State Office Building Annapolis, Maryland 21401

STATE	LAW	REFERENCE	ADMINISTERING AGENCY
Massachusetts	Clean Water Act	Ch. 21 General Laws as amended through the Acts of 1970	Water Resources Commission Division of Water Pollution Control Leverett Saltonstall Building Government Center Boston, Massachusetts 02202
Michigan	Water Pollution Control Law	Act 245, Public Acts of 1929 as amended by Act 117, P.A. 1949; Act 165, P.A. 1963; Act 405, P.A. 1965; Act 167, P.A. 1968; Act 209, P.A. 1968; Act 200, P.A. 1970	Water Resources Commission Stevens T. Mason Building, Sta. Lansing, Michigan 48926
Minnesota	Water Pollution Control Laws		Pollution Control Agency 717 Delaware Street, S.E. Minneapolis, Minnesota 55440
Mississippi	Water Pollution Control Law		Air & Water Pollution Control Comm. P. O. Box 827 Jackson, Mississippi 39205
Missouri	Clean Water Law	Senate Bill No. 424 Ch. 204.026 Para. 13 and Ch. 204.076 Para. 1 (1972)	Water Pollution Board P. O. Box 154 Jefferson City, Missouri 65101
Montana	Water Pollution Control Act	Title 69, Ch. 48, RCM, 1947, Sections 69-4806 and 69-4823 (as amended through 1971)	State Department of Health and Environmental Sciences Helena, Montana 59601
Nebraska	Environmental Protection Act	Sections 81-1501 to 81-1532 (1971) as amended by L.B. 1435 (1972)	Department of Environmental Control Environmental Control Council State House Station Lincoln, Nebraska
Nevada	Water Pollution Control Law	NRS 445.130 to 445.385 (1971)	Commission of Environmental Protection Department of Health, Welfare, and Rehabilitation Environmental Protection Hearing Board Carson City, Nevada 89701
New Hampshire	Water Pollution Control Law	Revised Statutes Annotated, Ch. 149 as amended (1971)	Water Supply and Pollution Control Commission 105 Loudon Road, Prescott Park Concord, New Hampshire 03301
New Jersey	Environmental Protection Act	R.S. 58: 11-12, 12-3 as amended by Chapter 91, N. J. Laws of 1970	Department of Environmental Protection P. O. Box 1390 Trenton, New Jersey 08625
New Mexico	Water Quality Act	Ch. 190, Laws of 1967 (as amended by Ch. 64, Laws of 1970 and by Ch. 277, Laws of 1971) 75-39-1 through 75-39-12 NMSA	Water Quality Control Comm. Environmental Improvement Agency P. O. Box 2348 Santa Fe, New Mexico 87501

STATE	LAW	REFERENCE	ADMINISTERING AGENCY
New York	State Environmental Conservation Law	Public Health Law Art. 12 as amended (1972)	Department of Environmental Conservation State Environmental Board Albany, New York
North Carolina	Water & Air Resources Act	Ch. 143, Art. 21 as amended (1971)	Board of Water & Air Resources P. O. Box 9392 Raleigh, North Carolina 27603
North Dakota	Water Pollution Control Law	Ch. 479, Sections 61-28-01 through 61-28-08 (1967)	Water Pollution Control Board Department of Health Bismarck, North Dakota 58501
Ohio	Water Pollution Control Act	Sections 6111.01 et seq. as amended (1967)	Water Pollution Control Board P. O. Box 118 Columbus, Ohio 43216
Oklahoma	Water Pollution Control Statutes	Title 63, Oklahoma Statutes, 1971	Department of Pollution Control Water Resources Board Department of Health 3400 North Eastern Oklahoma City, Oklahoma 73105
Oregon	Water & Air Pollution Control Laws	Oregon Revised Statutes, Ch. 449 (1971 Replacement Part)	Department of Environmental Quality Environmental Quality Comm. P. O. Box 231 Portland, Oregon 97201
Pennsylvania	The Clean Streams Law		Department of Environmental Resources Environmental Quality Board Environmental Hearing Board P. O. Box 2351 Harrisburg, Pennsylvania 17105
Puerto Rico	Water Pollution Control Law		Environmental Quality Board P. O. Box 11785 Santurce, Puerto Rico 00910
Rhode Island	Water Pollution Control Law	General Laws of 1956, Title 46 Ch. 12 as amended by PL 170, 1958, PL 89, 1963, PL 261, 1966, PL 196, 1967, PL 88, 1970, PL 289, 1970, PL 103, 1971, PL 236, 1971	Department of Health 335 State Office Building Providence, Rhode Island 02903
South Carolina	Pollution Control Act	Act 1157-1971 as amended by the 1971-1972 General Appropriation Act for the fiscal year 1971-1972	South Carolina Pollution Control Authority 1321 Lady Street Owen Building Columbia, South Carolina
South Dakota	Water Pollution Control Law		Committee on Water Pollution State Department of Health (Division of Sanitary Engineering & Environmental Protection) Pierre, South Dakota 57501

STATE	LAW	REFERENCE	ADMINISTERING AGENCY
Tennessee	Water Quality Control Act of 1971	Ch. 164, Public Acts of 1971 as amended by Ch. 386 Public Acts of 1971, Ch. 444 Public Acts of 1972, Ch. 631 Public Acts of 1972	Water Quality Board Department of Public Health 6th Avenue North Nashville, Tennessee 37219
Texas	Water Quality Act	Chapter 21, Subchapter C Section 21.079 and 21.091; Subchapter E, Section 21.252	Texas Water Quality Board 314 W. 11th Street Austin, Texas 78701
Utah	Water Pollution Control Act	Title 73, Ch. 14, Utah Code Annotated, 1953 as amended 1967	Water Pollution Committee 44 Medical Drive Salt Lake City, Utah 84113
Vermont	Water Pollution Control Act	Title 10, Vermont Statutes Annotated, Ch. 33 as amended (1972)	Department of Water Resources Water Resources Board 5 Court Street Montpelier, Vermont 05602
Virginia	Water Control Law	Ch. 3.1, Title 62.1 Code of Virginia, 1950, as amended (1970)	State Water Control Board P. O. Box 11143 Richmond, Virginia 23230
Washington	Water Pollution Control Laws	Chapter 90.48 RCW (1970) Section 90.48.140 and 90.48.160	Department of Ecology Ecological Commission Pollution Control Hearings Board P. O. Box 829 Olympia, Washington 98501
West Virginia	Water Pollution Control Act	Ch. 20, Article 5A, Code of West Virginia as amended (1969)	Department of Natural Resources Water Resources Board State Department of Health (Division of Sanitary Eng.) 1201 Greenbrier Street Charleston, West Virginia
Wisconsin	Water Pollution Control Law	Ch. 144, Wisconsin Statutes (1967)	Department of Natural Resources Natural Resources Board P. O. Box 450 Madison, Wisconsin 53701
Wyoming	Protection of Public Water Supply Act	Article 2, Section 35-184 et seq., as amended Laws 1957	Sanitary Engineering Services Stream Pollution Control Advisory Council State Office Building Cheyenne, Wyoming 82001

State	Reply Received	Have Emergency Plan*
Alabama	X	
Alaska	X	
Arizona	X	
Arkansas	X	X
California	X	X
Colorado	X	
Connecticut	X	
Delaware	X	
Florida	X	X
Georgia	X	
Guam	X	
Hawaii	X	
Idaho	X	X
Illinois, Springfield	X	X
Indiana	X	X
Iowa	X	X
Kansas	X	X
Kentucky	X	
Louisiana	X	X
Maine	X	X
Maryland, Baltimore	X	
Maryland, Annapolis	X	X
Massachusetts	X	
Michigan	X	
Minnesota	X	
Mississippi	X	
Missouri	X	X
Montana	X	
Nebraska	X	X
Nevada	X	
New Hampshire	X	
New Jersey	X	
New Mexico	X	
New York	X	X
North Carolina	X	
North Dakota	X	X
Ohio	X	X
Oklahoma	X	
Oregon	X	
Pennsylvania	X	X

*Emergency plan may be for oil and/or hazardous materials. Plans may be existing, tentative or in the planning stage.

State	Reply Received	Have Emergency Plan*
Rhode Island	X	
South Carolina	X	
South Dakota	X	
Tennessee	X	X
Texas	X	
Utah	X	
Vermont	X	
Virginia	X	X
Washington	X	X
West Virginia	X	X
Wisconsin	X	X
Wyoming	X	

C.1. Results of request for contingency plan information from State agencies.

Interstate Agency	Reply Received	Have Emergency Plan*
Bi-State Development Agency	X	
Interstate Sanitation Commission		
Ohio River Valley Water Sanitation Commission	X	X
Delaware River Basin Commission	X	X
Klamath River Compact Commission	X	
Tennessee River Basin Water Pollution Control Commission		
Interstate Commission on the Potomac River Basin	X	
New England Interstate Water Pollution Control Commission		

*Emergency plan may be for oil and/or hazardous materials. Plans may be existing, tentative or in planning stage.

C-2. Results of request for contingency plan information from interstate agencies.

SAMPLE

(NAME OF CITY)

WASTEWATER TREATMENT SYSTEM

EMERGENCY RESPONSE PAMPHLET*

GENERAL BACKGROUND

Our section of the country experiences natural disasters (hurricanes, tornadoes, etc.) on a recurring basis. This pamphlet has been prepared to serve as a guideline to prepare for and respond to this type of disaster.

The goal of this document is to disseminate information to all personnel within the treatment system. An informed and organized staff is essential in responding efficiently to emergency situations.

GENERAL INFORMATION

All supervisors will meet with System Superintendent when watch alert is issued.

Supervisor's responsibilities:

Report emergency conditions.

Maintain a log of all emergency activities.

Provide list of personnel to be on duty. (Provide time for these men to return home and arrange for protection of their families.)

Standby power equipment to be used only after power failure occurs.

Off-duty personnel monitor local radio/television stations for work schedule information.

*Similar to Pamphlet used in Fort Lauderdale, Florida

Superintendent will provide for welfare of men on duty during disaster (food, bedding, etc.)

DETAILED PROCEDURES (Hurricane/Severe Weather Watch Alert)

Superintendent

Organizes staff.

Maintains continuous monitoring of weather condition.

Checks out communications equipment.

DETAILED PROCEDURES (Hurricane/Severe Weather Warning Alert)

Superintendent

Initiates emergency response plan.

Maintenance crews

Check emergency generators and fuel supply.

Secure pump stations as directed.

Treatment Plant Operators

Check all emergency equipment.

Check chemical inventories.

Coordinate with maintenance personnel to secure equipment.

POST DISASTER ACTIONS

Perform severity analysis.

Organize crews as personnel report for work to repair priority items.

Submit assistance requests immediately to expedite and coordinate acquisition of supplies and parts.

FACILITIES

Treatment Plants and Pumping Stations	Phone Number	Radio Call Sign
Main Control Building Maintenance Shop Chlorine Building		
Digester Building		
Pump Station No. 1		
Pump Station No. 2		

COMMUNICATIONS INFORMATION

	Phone Number	Radio Call Sign
Dept. of Public Works		
Police		
Fire		

PERSONNEL

Title/Name	Home Phone	Emergency Duty Assignment
System Superintendent		Main Control Bldg.
Assistant System Superintendent		Main Control Bldg.
Maintenance Supervisor		Maintenance Shop
Chief Operator		Main Control Bldg.

EMERGENCY DIESEL GENERATORS

HP	KW	Location	Installation (Permanent/Portable)	Function
450	250	Pump Sta. No. 1	Portable	Pump Station
450	250	Main Plant	Permanent	Half of Treatment Plant

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